

SLOVENSKI STANDARD

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SIST EN 61360-1:2003/A1:2004

Tipi standardnih podatkovnih elementov s pripadajočo klasifikacijsko shemo za električne sestavne dele - 1. del: Definicije - Načela in metode (IEC 61360-1:2009)

Standard data element types with associated classification scheme for electric items - Part 1: Definitions - Principles and methods (IEC 61360-1:2009)

iTeh STANDARD PREVIEW

Genormte Datenelementtypen mit Klassifikationsschema für elektrische Bauteile - Teil 1: Definitionen - Regeln und Methoden (IEC 61360-1:2009)

[SIST EN 61360-1:2010](https://standards.itih.si/catalog/standards/sist/36ad1007-9cfd-47d3-b586-c48393438f59/sist-en-61360-1-2010)

Types normalisés d'éléments de données avec plan de classification pour composants électriques - Partie 1: Définitions, principes et méthodes (CEI 61360-1:2009)

Ta slovenski standard je istoveten z: EN 61360-1:2010

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61360-1

May 2010

ICS 31.020

Supersedes EN 61360-1:2002 + A1:2004

English version

**Standard data elements types with associated
classification scheme for electric items -
Part 1: Definitions -
Principles and methods
(IEC 61360-1:2009)**

Types normalisés d'éléments de données
avec plan de classification
pour composants électriques -
Partie 1: Définitions -
Principes et méthodes
(CEI 61360-1:2009)

Genormte Datenelementtypen
mit Klassifikationsschema für elektrische
Bauteile -
Teil 1: Definitionen -
Regeln und Methoden
(IEC 61360-1:2009)

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SIST EN 61360-1:2010

This European Standard was approved by CENELEC on 2010-05-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 3D/169/FDIS, future edition 3 of IEC 61360-1, prepared by 3D, Data sets for libraries, of IEC TC 3, Information structures, documentation and graphical symbols, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61360-1 on 2010-05-01.

This European Standard supersedes EN 61360-1:2002 + A1:2004.

This EN 61360-1:2010 includes the following significant technical changes with respect to EN 61360-1:2002 + A1:2004 :

- extended administrative data for status and source of content;
- support of multiple language variants for data element types and classes;
- support for multiple alternative units for data element types;
- improved conventions for definition writing based on ISO 704 and ISO/IEC 11179-4;
- enhanced definitions and descriptions.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-02-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2013-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61360-1:2009 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

- | | |
|------------------|--|
| IEC 60191-4:1999 | NOTE Harmonized as EN 60191-4:1999 (not modified). |
| IEC 60694 | NOTE Harmonized as EN 60694. |
-

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60027	Series	Letter symbols to be used in electrical technology	EN 60027	Series
IEC 60747	Series	Semiconductor devices	-	-
IEC 60748	Series	Semiconductor devices - Integrated circuits	-	-
IEC 61360-2	2002	Standard data element types with associated classification scheme for electric components - Part 2: EXPRESS dictionary schema	EN 61360-2	2002
IEC 61360-4	-	Standard data element types with associated classification scheme for electric components - Part 4: IEC reference collection of standard data element types and component classes	EN 61360-4	-
ISO/IEC 6523-1	-	Information technology - Structure for the identification of organizations and organization parts - Part 1: Identification of organization identification schemes	-	-
ISO/IEC 10646-1	-	Information technology - Universal Multiple-Octet Coded Character Set (UCS) - Part 1: Architecture and Basic Multilingual Plane	-	-
ISO/IEC 11179-3	-	Information technology - Specification and standardization of data elements - Part 3: Basic attributes of data elements	-	-
ISO 31	Series	Quantities and units	EN ISO 31	Series
ISO 639-1	-	Codes for the representation of names of languages - Part 1: Alpha-2 code	-	-
ISO 704	-	Terminology work - Principles and methods	-	-
ISO 843	1997	Information and documentation - Conversion of Greek characters into Latin characters	-	-
ISO 2382	Series	Data processing - Vocabulary	-	-
ISO 3166	Series	Codes for the representation of names of countries and their subdivisions	EN ISO 3166	Series
ISO 6093	-	Information processing - Representation of numerical values in character strings for information interchange	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 8601	-	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-
ISO 9735	-	Electronic data interchange for administration, commerce and transport (EDIFACT) - Application level syntax rules	-	-
ISO 10303-21	-	Industrial automation systems and integration - Product data representation and exchange - Part 21: Implementation methods: Clear text encoding of the exchange structure	-	-
ISO 13584-24	2003	Industrial automation systems and integration - Parts library - Part 24: Logical resources: Logical model of supplier library	-	-
ISO 13584-26	-	Industrial automation systems and integration - Parts library - Part 26: Logical resource: Information supplier identification	-	-
ISO 13584-42	-	Industrial automation systems and integration - Parts library - Part 42: Description methodology: Methodology for structuring part families	-	-
ISO 13731	-	Ergonomics of the thermal environment - Vocabulary and symbols	EN ISO 13731	-



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Standard data elements types with associated classification scheme for electric items –

Part 1: Definitions – Principles and methods

Types normalisés d'éléments de données avec plan de classification pour composants électriques –

Partie 1: Définitions – Principes et méthodes

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**STANDARD DATA ELEMENTS TYPES WITH ASSOCIATED
CLASSIFICATION SCHEME FOR ELECTRIC ITEMS –**
**Part 1: Definitions –
Principles and methods**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61360-1 has been prepared by subcommittee 3D, Data sets for libraries, of IEC technical committee 3: Information structures, documentation and graphical symbols.

This third edition cancels and replaces the second edition published in 2002, and its Amendment 1(2003). It is a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- extended administrative data for status and source of content;
- support of multiple language variants for data element types and classes;
- support for multiple alternative units for data element types;
- improved conventions for definition writing based on ISO 704 and ISO/IEC 11179-4;
- enhanced definitions and descriptions.

The text of this standard is based on the following documents:

FDIS	Report on voting
3D/169/FDIS	3D/172/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61360 series can be found, under the general title *Standard data elements types with associated classification scheme for electric items*, on the IEC website.

Future standards in this series will carry the new general title as cited above. Titles of existing standards in this series will be updated at the time of the next edition.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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STANDARD DATA ELEMENTS TYPES WITH ASSOCIATED CLASSIFICATION SCHEME FOR ELECTRIC ITEMS –

Part 1: Definitions – Principles and methods

1 General

1.1 Scope

This part of IEC 61360 provides a firm basis for the clear and unambiguous definition of characteristic properties (data element types) of all elements of electrotechnical systems from basic components to sub-assemblies and full systems. Although originally conceived in the context of providing a basis for the exchange of information on electric/electronic components, the principles and methods of this standard may be used in areas outside the original conception such as assemblies of components and electrotechnical systems and subsystems.

In addition, this standard provides for establishing a classification hierarchy and the allocation of applicable and relevant properties to each of the classes so established in order to describe fully the characteristics of objects belonging to that class.

Use of this standard facilitates the exchange of data describing electrotechnical systems through a defined structure for the information to be exchanged in a computer-sensible form. Each property to be exchanged will have an unambiguously defined meaning and consistent naming, where relevant a defined value list, a prescribed format and defined units of measure for all quantitative values. There is also provision for:

- control of changes to definitions of the properties through version and revision numbers;
- inclusion of notes and remarks to clarify and help in the application of the definitions;
- indication of the sources of definitions and value lists;
- associated figures and formulae.

NOTE IEC TCs and SCs, or other organizations may take this part of IEC 61360 as a basis for the development of their own dictionaries.

1.2 ISO/IEC EXPRESS information model

Closely associated with this part of IEC 61360 is IEC 61360-2. This part contains the information model, using the EXPRESS modelling language. In this model, the definition and structure of IEC 61360-1 is formalized and presented in a computer-sensible form. Use of this information model allows dictionary information to be exchanged between different systems using the STEP physical file format as defined in ISO 10303-21.

This information model has also been accepted as the common information model with ISO/TC184/SC4 and is reproduced as ISO 13584-42. Use may be made of other standards in the ISO 13584 series of standards for extension of the concepts defined in this standard. In particular ISO 13584-24 contains provisions which allow:

- extensions of the class structure to include feature and functional model classes;
- tabulation of properties;
- functional relationships among properties;
- references to graphical information;
- structuring of parts libraries.

NOTE This part of IEC 61360 is intended to be compliant with the upcoming Edition 3 of IEC 61360-2 and Edition 2 of ISO 13584-42.

1.3 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 61360-2 :2002, *Standard data element types with associated classification scheme for electric components – Part 2: EXPRESS dictionary schema* (available in English only)

IEC 61360-4, *Standard data element types with associated classification scheme for electric components – Part 4: IEC reference collection of standard data element types and component classes* (available in English only)¹

IEC 60747(all parts), *Semiconductor devices*

IEC 60748(all parts), *Semiconductor devices – Integrated circuits*

ISO 31(all parts), *Quantities and units*

ISO 639-1, *Codes for the representation of names of languages – Part 1: Alpha-2 code*

ISO 704, *Terminology work – Principles and methods*

ISO 843:1997, *Information and documentation – Conversion of Greek characters into Latin characters*

ISO 2382 (all parts), *Information processing systems – Vocabulary*

ISO 3166 (all parts), *Codes for the representation of names of countries and their subdivisions*

ISO 6093, *Information processing – Representation of numerical values in character strings for information interchange*

ISO 8601, *Data elements and interchange formats – Information interchange – Representation of dates and times*

ISO 9735, *Electronic data interchange for administration, commerce and transport (EDIFACT) – Application level syntax rules*²

ISO 10303-21, *Industrial automation systems and integration – Product data representation and exchange – Part 21: Implementation methods: Clear text encoding of the exchange structure*

ISO 13584-24:2003, *Industrial automation systems and integration – Parts library – Part 24: Logical resource: Logical model of supplier library*

¹ This publication was withdrawn and replaced by IEC CDD (see bibliography)..

² This normative reference is based on the Trade Data Elements Directory (TDED) of the United Nations Economic Commission for Europe (UNECE), Trade Facilitation.

ISO 13584-26, *Industrial automation systems and integration – Parts library – Part 26: Logical resource: Information supplier identification*

ISO 13584-42, *Industrial automation systems and integration – Parts library – Part 42: Description methodology: Methodology for structuring part families*

ISO 13731, *Ergonomics of the thermal environment – Vocabulary and symbols*

ISO/IEC 6523-1, *Information technology – Structure for the identification of organizations and organization parts – Part 1: Identification of organization identification schemes*

ISO/IEC 10646-1, *Information technology – Universal Multiple-Octet Coded Character set (UCS) – Part 1: Architecture and Basic Multilingual Plane*

ISO/IEC 11179-3, *Information technology – Metadata registries (MDR) – Part 3: Registry metamodel and basic attributes*

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE The definitions are presented in a logical order, an alphabetic list is included.

Alphabetic list of the terms

applicable data element type	2.23
attribute	2.12
classification	2.9
classifying data element type	2.8
component	2.17
computer-sensible information	2.22
condition data element type	2.7
data element type	2.3
data element type class	2.4
drawing	2.28
electric component	2.18
electric item	2.14
entity	2.1
feature	2.20
geometry	2.21
item	2.13
item class	2.15
limiting value	2.33
material	2.19
maximum value (max)	2.30
minimum value (min)	2.29
nominal value (nom)	2.32
non-quantitative data element type	2.6
outline style	2.26